

Abstract

This study examined the relationship between maternal mental health and infant-toddler social-emotional development. Maternal stress was significantly positively related to difficulties with infant-toddler internalizing behaviors. Maternal depression was significantly positively related to children's atypical behaviors and internalizing behaviors. These findings demonstrate the importance of providing community support to mothers with mental health concerns who have infants and toddlers.

Introduction

- Maternal depression can negatively affect the relationship between mother and child, resulting in the early onset of social and behavioral problems (Murray, 1992).
- Mothers who experience depression may have difficulty forming bonds with their children (Mason, Briggs, & Silver, 2011; Murray, Fiori-Cowley, & Hooper, 1996), which can lead to decreased social responsiveness (Murray et al., 1996).
- Parental stress has been found to adversely impact infant-toddler development, as it increases the likelihood of maternal depression (Huang, Costeines, Kaufman, & Ayala, 2014).
- Social-emotional development problems (i.e., internalizing behaviors) experienced during infancy and early childhood are often indicators of later depression (Beardslee, Wright, Gladstone, & Forbes, 2007).
- Maternal depression that persists though early childhood predicts increased levels of internalizing and externalizing behaviors at age 7 (Lyons-Ruth, Easterbrooks, & Cibelli, 1997).
- Stressed and depressed mothers living in impoverished, rural settings often lack access to high-quality mental health services (McCabe & Macnee, 2002).
- The purpose of this study was to examine the relationship between the maternal mental health of young mothers living in impoverished rural settings to infant-toddler social-emotional development.

Method

Participants

- Rural Early Head Start families participating in Getting Ready
- 224 mothers and their children living in rural communities
- See Tables 1 - 4 for demographic information.

Measures

- *Center for Epidemiologic Studies Depression Scale* (Radloff, 1985)
 - A self-report that measures maternal depression by assessing the presence of depression symptoms in the last week
- *Parenting Stress Index* (Abidin, 1995)
 - A self-report measure designed to predict problematic parenting
- *Infant-Toddler Social and Emotional Assessment* (Carter & Briggs-Gowan, 2000)
 - A questionnaire completed by Early Head Start teachers that tapped teachers' observations regarding the child's externalizing symptoms, internalizing symptoms, dysregulation, and competence

Table 1. *Demographic Characteristics of Mothers and Children*
n=224

	Mothers	Children
Age	<i>M</i> = 24.45 years (<i>SD</i> = 4.88) Mode = 23.00 years Range = 12 - 39 years	<i>M</i> = 10.25 months (<i>SD</i> = 7.12) Mode = 2.00 months Range = 1 - 32 months
Gender		
Male	0%	52.7%
Female	100%	47.3%
Race		
Hispanic	39%	35%
Non-Hispanic	61%	42.6%
Unknown	0%	22.4%

Table 2. *Demographic Characteristics of Mothers*
n=224

Age at birth of first child	<i>M</i> = 19.85 years (<i>SD</i> = 3.79) Mode = 18 years Range = 12 - 38 years
Current marital status	
Married	40.7%
Divorced	7.7%
Single, never married	24.4%
Separated	5%
With partner, not married	21.7%
Education Level	
Through 12th Grade or less	42.1%
High School Diploma or GED	29.4%
Some training beyond High School, but no degree	23.1%
Vocational Certificate or College Degree	5.5%

Table 3. *Demographic Characteristics of Families*

Father Figure Living in Home	69.2%
Annual Household Income	
Under \$14,000	51.2%
\$14,001 to \$22,000	15.6%
\$22,001 to \$30,000	6.9%
\$30,001 or more	1.9%
Other Support Received	
Women, Infants, and Children (WIC)	93.5%
Temporary Assistance for Needy Families (TANF)	27.4%
Medicaid	90.7%
Food Stamps	61.7%
School lunch/breakfast program	38%

Table 4. *Demographic Characteristics of Teachers*
n=52

Age	<i>M</i> = 31.9 years (<i>SD</i> = 9.44) Range = 19 - 57 years
Education Level	
High School Diploma	3.8%
Some training beyond High School, but no degree	32.7%
Vocational Certificate	7.7%
Two Year College Degree	36.5%
Four Year College Degree or more	19.3%
Relevant Experience	
Early Childhood Setting	<i>M</i> = 62.13 months (<i>SD</i> = 58.82) Range = 0 - 228 months
Home Visiting Services	<i>M</i> = 26.68 months (<i>SD</i> = 33.99) Range = 0 - 192 months
Home Visiting Services with Early Childhood Focus	<i>M</i> = 27.2 months (<i>SD</i> = 38.47) Range = 0 - 192 months

Results

- Parenting stress and maternal depression were positively related to infant-toddler internalizing behaviors (r 's = .279 and .252 respectively; p 's = .020 and .037 respectively).
- As maternal stress and depression increased, infant-toddler internalizing behaviors increased.
- Maternal depression was positively related to infant-toddler atypical behaviors (r = .248, p = .022).
- As maternal depression increased, infants and toddlers demonstrated more atypical behaviors (e.g., lack of awareness of environment, repetitive movements).
- Parental distress was positively related to infant-toddler internalizing symptoms (r = .310, p = .009).
- Mothers who reported more stress in their parenting roles had children who showed increased levels of depression/withdrawal, anxiety, separation distress, and inhibition to novelty.
- Parental stress was positively related to infant-toddler internalizing problems (r = .240, p = .047).
- Mothers who reported the presence of difficult child behavioral characteristics had children who had more internalizing behaviors.

Discussion

- This study supports previous research on the importance of maternal mental health (Feldman et al, 2009; Shaw, Gilliom, Ingoldsby & Nagin, 2003) with an impoverished rural Nebraska sample. Maternal stress and depression were related to a host of social-emotional risks in infants and toddlers.
- Parents living in rural settings are at-risk for developing mental health concerns due to the high levels of poverty and low levels of education prevalent in rural America (Human & Wasem, 1991; McCabe & Macnee, 2002).
- Young mothers living in impoverished, rural settings may be isolated from mental health services due to the lack of availability, lack of access, and lack of acceptability of mental health services (Human & Wasem, 1991).
- Mothers living in rural settings may also lack adequate sources of social support, which have been found to decrease the negative effects of maternal stress and depression on infant-toddler social-emotional development (Haberle, Krill, Briggs-Gowan, & Carter, 2014).
- Study limitations:
 - Results are correlational.
 - All data was collected via parent and teacher questionnaires.
 - Participants were from one rural region.

Implications for Practice

- Early Head Start teachers sensitive to maternal stress and depression are in a unique position to support young mothers in rural settings who may not have easy access to other support systems (e.g., close relatives, friends, community parent groups).
 - The social relationship that home visitors establish with mothers may increase maternal competence and confidence in their parenting role.
 - Strengthening the relationship between mothers and their young children may reduce the negative effects of maternal stress and depression on infant-toddler social-emotional development.